## HANDBOOK OF PHONOLOGICAL DATA FROM A SAMPLE OF THE WORLD'S LANGUAGES

A Report of the Stanford Phonology Archive

Compiled and edited by

John H. Crothers James P. Lorentz Donald A. Sherman Marilyn M. Vihman

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720 Salish	720 Salish	720 Salish
01 p	20 t/l-fricative-ejective <sup>01</sup>	[i]61 (free)
02 p-ejective <sup>01</sup>	21 t/s-hacek	[e] <sup>62</sup> (free)
03 b [b-unreleased] <sup>60</sup>	22 t/s-hacek-ejective <sup>01</sup>	[epsilon-over-short] 63 (free) [e/vod] 64
04 t	23 d/z-hacek <sup>31</sup> (limited)	(free) [e/epsilon-glide] <sup>65</sup>
05 t-ejective <sup>01</sup>	24 5	(free)
06 d [d-unreleased] <sup>60</sup>	25 s-hacek	52 a *[schwa] {epsilon-dot] <sup>66</sup>
07 k	26 x-labialized	(allo, free)
08 k-labialized	27 x-uvular	53 upsilon <sup>34</sup> . [u]61
09 k-ejective <sup>01</sup>	28 x-uvular-labialized	(free) [o]62
10 k-ejective-labialized <sup>01</sup>	29 m <sup>32</sup> (limited)	(free) [o-open-over-short] <sup>63</sup>
11 g <sup>30</sup>	30 n <sup>32</sup>	(free)
12 g-labialized <sup>02</sup>	(limited)	54 yod
13 q	31 1 <sup>33</sup>	55 W
14 q-labialized	32 l-fricative	56 schwa <sup>66</sup> (tas(+),free)
15 q-ejective <sup>01</sup>	33 glottal stop	*/a/ · [schwa-voiceless] <sup>67</sup>
16 q-ejective-labialized <sup>01</sup>	34 h	57 e-long
17 t/s		58 a-long
18 t/s-ejective <sup>01</sup>		59 upsilon-long
19 d/z	51 iota	,

- 720 \$a Puget Sound Salish \$b Southern \$d Salish \$e NW Washington \$f 10 \$g Merritt Ruhlen \$g Jim Lorentz (review) \$g John Crothers (editor)
- 720 \$a Snyder, Warren, A. \$b 1968 \$c Southern Puget Sound Salish: Phonology and Morphology \$d Sacramento Anthropological Society 8.2-22 \$q informants \$r unknown
- \$a LONG VOHELS \$A Snyder does not regard vowel length as phonemic. However, he has clear minimal pairs showing contrastive length (p.7) for the three basic vowels. He interprets this as an accentual difference, writing short accented vowels with an accent on the preceding consonant, and long accented vowels with an accent on the vowel. I cannot see that this represents anything more than a notational device, and have reinterpreted vowel length as distinctive. [JHC]
- \$a MORPHEME STRUCTURE \$A (C)(C)V(C)(C) \$A This formula is a simplification, and is based on the analysis of /schwa/ as an independent phoneme. Snyder, who regards /schwa/ as an inserted element, also finds roots with the structure CC and CCC. There are also a very few disyllabic patterns. See p.14.
- 720 \$a STRESS \$A "The placing of stress is phonemic. In several examples the meaning of a word may be altered if stress is transferred from the root to a following suffix." (p.6)
- \$a SYLLABLE \$A (C)(V(:)) \$A The interpretation of syllable structure in Puget Sound Salish, as in other Salishan and Wakashan languages, is problematic due to the large number of reduced syllables, consonants separated only by a brief voiceless transition, and consonants connected simply by prolongation of the fricative element of the first consonant. Snyder opts for an interpretation in which there are no phonetic consonant clusters, that is, in which every consonant begins a syllable. Many such syllables contain only a very brief voiceless vowel, or prolonged voiceless fricative, as the syllable peak. See pp.17ff. [JHC]

- \$a VELAR CONSONANTS \$a UVULAR CONSONANTS \$A Snyder uses familiar symbols for velar and uvular consonants, but calls the two series "palatal" and "velar" respectively. In the absence of any explicit discussion of the articulations by Snyder, one can only conclude that the "palatals" may range anywhere from palatal through prevelar to mid-velar, while the "velars" correspondingly could be anywhere from velar to uvular. The Archive interpretation is based on the symbols, not the articulatory labels. This is in agreement with the interpretation of other Wakashan and Salishan languages. [JHC]
- \$a VONELS \$a TRANSITIONAL SOUNDS \$A The vowels of Puget Sound Salish seem to present the same 720 range of problems, both phonetically and phonologically, as are found in other Wakashan and Salishan languages. In particular, it is possible to eliminate /schwa/ from the phoneme inventory if rules for its occurrence are stated in terms of morpheme boundary, stress, and surrounding segments. This leads to the establishment of a class of roots which phonologically "lack" a vowel, though phonetically they have [schwa] when stressed. In the Archive /schwa/ is. treated as a fourth vowel phoneme because it does occur under stress, in contrast with the other three vowel phonemes. In unstressed position it appears that roots with /schwa/ behave just like any sequence of consonants, that is, there may be a voiced or voiceless [schwa] or other transitional sound between the consonants, depending on the nature of the consonants. A rough generalization, based on Snyder's rules (p.15f) is that between voiceless consonants a voiceless transition occurs, either a voiceless vowel or a prolonged fricative, while if one of the consonants is voiced the transition is a voiced [schwal. But glides as second element of a cluster do not require a transitional [schwal, and laterals as first element of a cluster have a transitional []]. [JHC]
- 720 01 \$A "The articulation of glottalized consonants is usually very fortis. Particularly when glottalized consonants are not followed by vocoids or [epenthetic] []], the duration of exploded air often is marked." (p.13)
- 720 02 \$A /g-labialized/ is described as "terminally voiceless" when before a voiceless consonant. (p.16) Possibly this refers to a voiceless transition between the two consonants. [JHC]
- 720 30 \$A "/g/ is a rare phoneme and occurs most frequently in morpheme initial position." (p.10) It does not occur in morpheme final position. (p.14)
- 720 31 \$A "/d/z-hacek/ is a rare phoneme." (p.12)
- 720 32 \$A "The masal bilabial stop [m] occurs in only one of the words that have been recorded....

  Occasionally some informants will substitute [n] for [d].... The masal stops [m] and [n] occur in some surrounding Salishan dialects and are regularly replaced in this dialect with the stops [b] and [d]." (p.10)
- 720 33 \$A [l] is inserted (1) between morpheme final [l-fricative] or [t/l-fricative-ejective] and a following voiced consonant, (2) between root final [l-fricative] and a following vowel. (p.15, 16) Compare transitional [schwa] and [schwa-voiceless].
- 720 34 \$A "/upsilon/ seldom follows a morpheme initial labialized consonant." (p.14)
- 720 60 \$A "/b/ and /d/ are unreleased in word final position, in suffix final position when followed by a consonant, and in root final position when followed by a voiceless consonant." (p.10)
- 5A When morpheme initial, "free variation occurs between the allophones [i] and [iota] of the (stressed) /iota/ phoneme and [u] and [upsilon] of the (stressed) /upsilon/ phoneme when the vowels are preceded by a nonglottalized bilabial, alveolar, alveopalatal, or palatal (= [velar]) stop or fricative and the resonant consonant /1/ except when the vowels are followed by a velar (= [uvular]) consonant or /g-labialized/." (p.3)
- 720 62 \$A When morpheme-initial, "free variation occurs between the allophones [e] and [iotal of the (stressed) /iota/ phoneme and [o] and [upsilon] of the (stressed) /upsilon/ phoneme: (a) when the vowels are preceded by glottalized, velar (= [uvular]), or glottal consonants and the resonant consonants /w/ and /yod/; (b) when the vowels are followed by a velar (= [uvular]) consonant or /g-labialized/." (p.2)
- 5A "When high vowels /iota/ and /upsilon/ occur in unstressed positions, particularly in affixes and enclitics, there is often a tendency for the vowel to be very short and for its articulation to be relaxed so that it approaches a central position... These vocoids have often been transcribed as the central vocoid /schwa/, but it is doubtful that they ever fully reach the central position. Relaxing of the articulation of unstressed vowels is most noticeable in rapid speech. In slow speech the unstressed vowels are less relaxed but generally have a wide range of free variation. While consonants that precede or follow unstressed vowels seem to have some effects, they are less definite than in the case of stressed vowels." (p.5)
- 720 64 \$A /iota/ may be realized as [e/yod] between a uvular and a lateral. (p.4)
- 720 65 \$A The free variant [e] of /iota/ may vary to [e/epsilon-glide] before uvular consonants. (p.5)
- 720 66 \$A /a/ may be realized as [epsilon-dot] when unstressed, in free variation with [schwa]. (p.5)

720 67 \$A Ischwa-voiceless! occurs unstressed between a voiceless nonglottalized obstruent and another voiceless consonant. (p.15) In this position (i.e. unstressed) roots containing /schwa/ behave just like any sequence of consonants between which a transitional sound is inserted.